

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method for preparing an upstream profile and a downstream profile, the method comprising the steps of:

preparing a downstream profile;

preparing an upstream profile using the prepared downstream profile, both of the upstream profile and the downstream profile corresponding to characteristics of an image recording device and being used to process image data that is used for recording images on a recording medium by the image recording device, the upstream profile being used for performing a prior process on the image data and the downstream profile being used for performing a subsequent process on the image data already processed by the prior process; and

judging, after the downstream profile preparation process and before the upstream profile preparation process, whether the downstream profile has been properly prepared by processing image data using the prepared downstream profile, by controlling the image recording device to record the processed image data on a recording medium, by examining a recorded result, and by judging whether the downstream profile has been properly prepared based on the examined result, and when it is judged that the downstream profile has been improperly prepared, preventing the upstream profile preparation process from being performed based on the improperly-prepared downstream profile.

2. (Original) A method as claimed in claim 1, wherein the prevention process includes the step of terminating preparation of the upstream and downstream profiles.

3. (Original) A method as claimed in claim 1, wherein the judgement process restarts the downstream profile preparation process when it is judged that the downstream profile has been improperly prepared.

4. (Previously Presented) A method as claimed in claim 1, further comprising the steps of:

storing a presently-existing downstream profile and a presently-existing upstream profile as an initial downstream profile and an initial upstream profile; and

judging, after the upstream profile preparation process, whether the prepared upstream and downstream profiles have been properly prepared by processing image data

using the prepared upstream profile in a prior process, by further processing the processed image data using the prepared downstream profile in a subsequent process, by controlling the image recording device to record on a recording medium the image data processed using both of the upstream and downstream profiles, by examining a recorded result, and by judging whether the upstream profile and the downstream profile have been properly prepared based on the examined result, and when it is judged that at least one of the upstream and downstream profiles has been improperly prepared, restoring the upstream and downstream profiles to the initial downstream and upstream profiles.

5. (Original) A method as claimed in claim 4, further comprising, after the restoring process, the step of terminating preparation of the upstream and downstream profiles.

6. (Original) A method as claimed in claim 4, further comprising, after the restoring process, the step of restarting the downstream profile preparation process.

7. (Currently Amended) An apparatus for preparing profiles, the apparatus comprising:

a downstream profile preparing unit preparing a downstream profile;
an upstream profile preparing unit preparing an upstream profile using the prepared downstream profile, both of the upstream profile and the downstream profile corresponding to characteristics of an image recording device and being used to process image data that is used for recording images on a recording medium by the image recording device, the upstream profile being used for performing a prior process on the image data and the downstream profile being used for performing a subsequent process on the image data already processed by the prior process; and

a judging unit judging, after the downstream profile preparation process and before the upstream profile preparation process, whether the downstream profile has been properly prepared by processing image data using the prepared downstream profile, by controlling the image recording device to record the processed image data on a recording medium, by examining a recorded result, and by judging whether the downstream profile has been properly prepared based on the examined result, and when it is judged that the downstream profile has been improperly prepared, preventing the upstream profile preparation unit from performing the preparation based on the improperly-prepared downstream profile.

8. (Original) An apparatus as claimed in claim 7, wherein the judging unit controls the upstream and downstream profile preparing units to terminate preparation of the upstream and downstream profiles, thereby preventing the upstream profile preparation unit from performing the preparation based on the improperly-prepared downstream profile.

9. (Original) An apparatus as claimed in claim 7, wherein the judging unit controls the downstream profile preparing unit to restart the downstream profile preparation process when it is judged that the downstream profile has been improperly prepared.

10. (Previously Presented) An apparatus as claimed in claim 7, further comprising a storage unit storing a presently-existing downstream profile and a presently-existing upstream profile as an initial downstream profile and an initial upstream profile; and

wherein the judging unit judges, after the upstream profile preparation process, whether the prepared upstream and downstream profiles have been properly prepared by processing image data using the prepared upstream profile in a prior process, by further processing the processed image data using the prepared downstream profile in a subsequent process, by controlling the image recording device to record on a recording medium the image data processed using both of the upstream and downstream profiles, by examining a recorded result and by judging whether or not the upstream profile and the downstream profile have been properly prepared based on the examined result, and when it is judged that at least one of the upstream and downstream profiles has been improperly prepared, restores the upstream and downstream profiles to the initial downstream and upstream profiles.

11. (Original) An apparatus as claimed in claim 10, wherein the judging unit controls, after the restoring process, the upstream and downstream preparing unit to terminate the preparation of the upstream and downstream profiles.

12. (Original) An apparatus as claimed in claim 10, wherein the judging unit controls, after the restoring process, the downstream profile preparing unit to restart the downstream profile preparation process.

13. (Currently Amended) A data storage medium storing, in a manner readable by a computer, a program for preparing profiles, the program comprising:

a program ~~of~~for preparing a downstream profile;

a program ~~of~~for preparing an upstream profile using the prepared downstream profile, both of the upstream profile and the downstream profile corresponding to characteristics of an image recording device and being used to process image data that is used for recording images on a recording medium by the image recording device, the upstream

profile being used for performing a prior process on the image data and the downstream profile being used for performing a subsequent process on the image data already processed by the prior process; and

a program ~~of~~for judging, after the downstream profile preparation process and before the upstream profile preparation process, whether the downstream profile has been properly prepared by processing image data using the prepared downstream profile, by controlling the image recording device to record the processed image data on a recording medium, by examining a recorded result, and by judging whether or not the downstream profile has been properly prepared based on the examined result, and when it is judged that the downstream profile has been improperly prepared, preventing the upstream profile preparation process from being performed based on the improperly-prepared downstream profile.

14. (Previously Presented) A method as claimed in claim 1,

wherein the upstream profile has an upstream correction curve, the upstream correction curve indicating, in correspondence with each set of a plurality of sets of image data that are inputtable to the prior process, another set of image data that should be obtained based on the subject set of image data through the prior process, and

wherein the downstream profile has a downstream correction curve, the downstream correction curve indicating, in correspondence with each set of a plurality of sets of image data that are inputtable to the subsequent process, another set of image data that should be obtained based on the subject set of image data through the subsequent process,

wherein the downstream profile preparing step includes the steps of:
preparing several sets of image data that are inputtable to the subsequent process;

controlling the image recording device to record the several sets of image data on a recording medium without subjecting the several sets of image data to the subsequent process;

generating a measurement curve based on the recorded result, the measurement curve indicating, in correspondence with each set of the plurality of sets of image data that are inputtable to the subsequent process, a density level that will be actually obtained on the recording medium based on the subject set of image data; and

generating the downstream correction curve based on the measurement curve and a reference line, the reference line indicating, in correspondence with each set of the

plurality of sets of image data that are inputtable to the subsequent process, a density level that is desired to be obtained on the recording medium based on the subject set of image data, and

wherein the upstream profile preparing step includes the steps of:

preparing several sets of image data that are inputtable to the prior process;

subjecting the several sets of image data to the subsequent process by using the downstream profile without subjecting the several sets of image data to the prior process, thereby generating several sets of processed image data;

controlling the image recording device to record the several sets of processed image data on a recording medium;

generating another measurement curve based on the recorded result, the another measurement curve indicating, in correspondence with each set of the plurality of sets of image data that are inputtable to the prior process, a density level that will be actually obtained on the recording medium based on the subject set of image data; and

generating the upstream correction curve based on the measurement curve and another reference line, the another reference line indicating, in correspondence with each set of the plurality of sets of image data that are inputtable to the prior process, a density level that is desired to be obtained on the recording medium based on the subject set of image data.

15. (Previously Presented) An apparatus as claimed in claim 7,

wherein the upstream profile has an upstream correction curve, the upstream correction curve indicating, in correspondence with each set of a plurality of sets of image data that are inputtable to the prior process, another set of image data that should be obtained based on the subject set of image data through the prior process, and

wherein the downstream profile has a downstream correction curve, the downstream correction curve indicating, in correspondence with each set of a plurality of sets of image data that are inputtable to the subsequent process, another set of image data that should be obtained based on the subject set of image data through the subsequent process,

wherein the downstream profile preparing unit includes:

a data preparing unit preparing several sets of image data that are inputtable to the subsequent process;

a control unit controlling the image recording device to record the several sets of image data on a recording medium without subjecting the several sets of image data to the subsequent process;

a measurement curve generating a measurement curve based on the recorded result, the measurement curve indicating, in correspondence with each set of the plurality of sets of image data that are inputtable to the subsequent process, a density level that will be actually obtained on the recording medium based on the subject set of image data; and

a downstream-correction-curve generating unit generating the downstream correction curve based on the measurement curve and a reference line, the reference line indicating, in correspondence with each set of the plurality of sets of image data that are inputtable to the subsequent process, a density level that is desired to be obtained on the recording medium based on the subject set of image data, and

wherein the upstream profile preparing unit includes:

another data preparing unit preparing several sets of image data that are inputtable to the prior process;

a processing unit subjecting the several sets of image data to the subsequent process by using the downstream profile without subjecting the several sets of image data to the prior process, thereby generating several sets of processed image data;

another control unit controlling the image recording device to record the several sets of processed image data on a recording medium;

another measurement curve generating unit generating another measurement curve based on the recorded result, the another measurement curve indicating, in correspondence with each set of the plurality of sets of image data that are inputtable to the prior process, a density level that will be actually obtained on the recording medium based on the subject set of image data; and

an upstream-correction-curve generating unit generating the upstream correction curve based on the measurement curve and another reference line, the another reference line indicating, in correspondence with each set of the plurality of sets of image data that are inputtable to the prior process, a density level that is desired to be obtained on the recording medium based on the subject set of image data.

16. (Previously Presented) A data storage medium as claimed in claim 13,

wherein the upstream profile has an upstream correction curve, the upstream correction curve indicating, in correspondence with each set of a plurality of sets of image data that are inputtable to the prior process, another set of image data that should be obtained based on the subject set of image data through the prior process, and

wherein the downstream profile has a downstream correction curve, the downstream correction curve indicating, in correspondence with each set of a plurality of sets of image data that are inputtable to the subsequent process, another set of image data that should be obtained based on the subject set of image data through the subsequent process,

wherein the downstream profile preparing program includes:

a program of preparing several sets of image data that are inputtable to the subsequent process;

a program of controlling the image recording device to record the several sets of image data on a recording medium without subjecting the several sets of image data to the subsequent process;

a program of generating a measurement curve based on the recorded result, the measurement curve indicating, in correspondence with each set of the plurality of sets of image data that are inputtable to the subsequent process, a density level that will be actually obtained on the recording medium based on the subject set of image data; and

a program of generating the downstream correction curve based on the measurement curve and a reference line, the reference line indicating, in correspondence with each set of the plurality of sets of image data that are inputtable to the subsequent process, a density level that is desired to be obtained on the recording medium based on the subject set of image data, and

wherein the upstream profile preparing program includes:

a program of preparing several sets of image data that are inputtable to the prior process;

a program of subjecting the several sets of image data to the subsequent process by using the downstream profile without subjecting the several sets of image data to the prior process, thereby generating several sets of processed image data;

a program of controlling the image recording device to record the several sets of processed image data on a recording medium;

a program of generating another measurement curve based on the recorded result, the another measurement curve indicating, in correspondence with each set of the plurality of sets of image data that are inputtable to the prior process, a density level that will be actually obtained on the recording medium based on the subject set of image data; and

a program of generating the upstream correction curve based on the measurement curve and another reference line, the another reference line indicating, in

correspondence with each set of the plurality of sets of image data that are inputtable to the prior process, a density level that is desired to be obtained on the recording medium based on the subject set of image data.